

Application No.: 10/088,501
Amendment Dated: December 9, 2003
Reply to Office Action of: September 16, 2003

--ABSTRACT

COS is selectively removed with respect to CO₂ from a hydrocarbonaceous fluid stream which contains CO₂ and COS. Examples of the fluid stream include a gas stream, for example natural gas, synthesis gas from heavy oil or heavy residues or refinery gas, or from liquid or liquefied hydrocarbons, for example LPG (Liquefied Petroleum Gas) or NGL (Natural Gas Liquids). The process is carried out by (1) intimately contacting the fluid stream in an absorption or extraction zone with a scrubbing liquor consisting of an aqueous amine solution containing from 1.5 to 5 mol/l of an aliphatic alkanolamine having of from 2 to 12 carbon atoms and from 0.8 to 1.7 mol/l of at least one activator selected from the group consisting of piperazine, methyl piperazine and morpholine, (2) removing the COS essentially completely from the fluid stream, and (3) separating the substantially COS-decontaminated fluid stream and the COS-loaded scrubbing liquor and discharging them from the absorption or extraction zone.--